

AMENDMENTS TO THE CLAIMS

This listing of claims replaces, without prejudice, all prior versions and listings of claims in the application:

1-42 (Canceled).

43. (New) A method of creating stereochemical deformations in the molecules of a given medium by a moving magnetic field, comprising the steps of:

providing the given medium in a pipe;

providing a first coil or pair of coils and applying a first current as a function of time to said first coil or pair of coils to generate a first magnetic field through the given medium;

providing a second coil or a pair of coils and applying a second current to said second coil or pair of coils to generate a second magnetic field through the given medium;

wherein said first and second magnetic fields intersect so as to define a magnetic field plane, the directions of said first and second magnetic fields subtending between them a predefined angle within the magnetic field plane, the said magnetic field plane not being parallel to the axis of the pipe; and

varying the amplitude of said first and second magnetic fields over time in such a manner that the resultant of said first and second magnetic fields is a magnetic field moving in said field plane having an amplitude which is variable over time and a direction moving at a variable angular velocity.

44. (New) A method according to claim 43, wherein said currents are currents of the same frequency but of different amplitudes, and shifted in phase by 90°.

45. (New) A method according to claim 43, wherein said currents are currents of the same amplitude but of different frequencies.

46. (New) A method according to claim 43, comprising disposing the first and second coils or pairs of coils on the exterior of the pipe.

47. (New) A method according to claim 43, comprising disposing the first and second coils or pairs of coils inside the pipe.

48. (New) A method according to claim 43, in which magnetic field plane forms an angle of between 45° and 90° with the direction of flow of the fluid to be treated.

49. (New) A method according to claim 43, comprising the step of generating at least one of said magnetic fields by a said coil or pair of coils having a core of a ferromagnetic substance to close the magnetic fields generated by said coils.

50. (New) A method according to claim 43, comprising:
generating a plurality of first magnetic fields through the given medium; and
generating a respective plurality of second magnetic fields through the given medium;

wherein each said first magnetic field and respective second magnetic field intersect so as to define a respective magnetic field plane, the magnetic field planes being parallel.

51. (New) A method according to claim 50, comprising the step of generating at least one of said pluralities of magnetic fields by a said coil or pair of coils having a core of a ferromagnetic substance to close the magnetic fields generated by said coils, said core being U-shaped, in which case the magnetic field generated occurs in two parallel magnetic field planes, or E-shaped in which case the magnetic field generated occurs in three parallel magnetic field planes.

52. (New) A method according to claim 43, in which said given medium is a limestone water, the application of the magnetic field generated preventing the deposit of limestone incrustations on the walls of pipes, boilers, etc.

53. (New) A method according to claim 43, in which said given medium is a fuel for a heat engine, the application of the magnetic field generated enabling said fuel to enhance and improve combustion efficiency.

54. (New) A method of creating stereochemical deformations in the molecules of a given medium by a magnetic field comprising the steps of:

providing a first coil or pair of coils and applying a first current to said first coil or pair of coils to generate a first magnetic field;

providing a second coil or pair of coils and applying a second current to said second coil or pair of coils to generate a second magnetic field, said first magnetic field and said second magnetic field defining a magnetic field plane, the directions of said first and second magnetic fields subtending between them a predefined angle in the magnetic field plane; and

varying the intensities and frequencies of said first and second currents over time independently of one another in such a manner that the resultant of said first and second magnetic fields is a magnetic field moving in said field plane having an amplitude which is variable over time and a direction moving at a variable angular velocity.

55. (New) A method according to claim 54, in which said given medium is a fluid flowing through a pipe, comprising the step of generating said first and second magnetic field by means disposed on the exterior of said pipe.

56. (New) A method according to claim 54, in which the magnetic field plane forms an angle of between 45° and 90° with the direction of flow of the fluid to be treated.

57. (New) A method of creating stereochemical deformations in the molecules of a medium, comprising the steps of:

providing the medium;

providing a first coil or pair of coils;

applying a first current to said first coil or pair of coils and thereby generating a first magnetic field passing through the medium;

providing a second coil or pair of coils;

applying a second current to said second coil or pair of coils and thereby generating a second magnetic field passing through the medium and subtending a predefined angle with the first magnetic field;

the first and second magnetic fields defining a common magnetic field plane; and

varying the magnitudes or frequencies of said first and second currents in such a manner that they bear no relation to each other and the resultant of said first and second magnetic fields is a magnetic field moving in said field plane having an amplitude which is variable over time and having a direction moving at a variable angular velocity, so that said vector product varies over time;

wherein the magnetic field creates stereochemical deformations in the molecules of said medium in dependence on the vector product of the intensity of the magnetic field by its velocity.

58. (New) A method according to claim 57, comprising applying sinusoidal currents of the same amplitude but different frequencies as said first and second currents.

59. (New) A method according to claim 57, wherein said medium is a fluid flowing through a pipe, comprising generating said first and second magnetic fields in a magnetic field plane that forms an angle of between 45° and 90° with the direction of flow of said fluid.

60. (New) A method, comprising the steps of:

generating a first magnetic field;

generating a second magnetic field, lying in and defining a common magnetic field plane with the first magnetic field, the first magnetic field and the second magnetic field subtending between them a predefined angle oblique to each other; and

varying the amplitude of at least one of the first and second magnetic fields over time in such a manner that the resultant of said first and second magnetic fields is a resultant magnetic field moving in the common magnetic field plane having an amplitude which is variable over time and having a direction moving at a variable angular velocity, so that the vector product of the resultant field by its velocity varies over time;

wherein the resultant magnetic field creates stereochemical deformations in the molecules of the medium in dependence on the vector product.

61. (New). A method according to claim 60, in which said given medium is a fluid flowing through a pipe, and in which the steps of generating the first and second magnetic fields use coils disposed on the exterior of said pipe.

62. (New) A method according to claim 60, in which the magnetic field plane forms an angle of between 45° and 90° with the direction of flow of the fluid to be treated.